Material Safety Data Sheet

Vedolizumab Drug Level ELISA

Catalog Number: 30-VELHU-E01

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Safety Data Sheet

GENERIC EU SDS
ACCORDING TO REGULATION (EC) NO. 1272/2008

Version 3.0
Revision Date: 2016-08-19
Print Date: 2016-08-19
NO COUNTRY SPECIFIC DATA

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier: **Vedolizumab drug level LC-MS/MS Kit**

Product number: 30-VELHU-E01

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory reagents

1.3. Details of the supplier of the safety data sheet

Address: ALPCO
26-G Keewaydin Drive
Salem, NH 03079

Telephone number: 800-592-5726

E-Mail address: cs@alpco.com

1.4. Emergency telephone number:

Emergency phone number: +49-6251-701-900 (8:00 a.m. - 6:15 p.m. CET)

2. Hazards identification

2.1. Classification of the substance or mixture
See special instruction sheet.

2.2. Label elements
See special instruction sheet.

2.3. Other hazards
Results of PBT and vPvB assessment
- PBT: Not applicable
- vPvB: Not applicable

3. Composition/information on ingredients

3.1/3.2 Substances/Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component/ Reagent	CAS-No.	EC-No	EC-Index No	Content [%]	Classification according to Regulation (EC) No 1272/2008 [CLP]		Special instruction see on
MOPHA B -Acetonitrile-	75-05-8	200-835-2	608-001-00-3	> 90	Flam. Liq. 2 Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Eye Irrit. 2	H225 H332 H312 H302 H319	**SHEET 2**
ACTSOL -Formic acid-	64-18-6	200-579-1	607-001-00-0	> 80	Flam. Liq. 3 Skin corr. 1A	H226 H314	**SHEET22**

Component/ Reagent	CAS-No.	EC-No	EC-Index No	Content [%]	Classification according to Regulation (EC) No 1272/2008 [CLP]		Special instruction see on
SOL A INT STD -Acetonitrile-	75-05-8	200-835-2	608-001-00-3	< 15	Flam. Liq. 2 Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Eye Irrit. 2	H225 H332 H312 H302 H319	**SHEET 2**

VEDOLIZUMAB *ImmuTube*® EXTRACTION KIT (KM9610)

Component/ Reagent	CAS-No.	EC-No	EC-Index No	Content [%]	Classification according to Regulation (EC) No 1272/2008 [CLP]		Special instruction see on
ELUREAG -Acetonitrile-	75-05-8	200-835-2	608-001-00-3	< 80	Flam. Liq. 2 Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Eye Irrit. 2	H225 H332 H312 H302 H319	**SHEET 2**

VEDOLIZUMAB *ImmuTube*® DIGEST KIT (KM9620)

Component/ Reagent	CAS-No.	EC-No	EC-Index No	Content [%]	Classification according to Regulation (EC) No 1272/2008 [CLP]		Special instruction see on
BUF IA -Iodoacetamide-	144-48-9	205-630-1	-	< 5	Acute Tox. 3 Resp. Sens. 1 Skin Sens. 1	H301 H317 H334	**SHEET 41**
STOP -Formic acid-	64-18-6	200-579-1	607-001-00-0	< 15	Flam. Liq. 3 Skin corr. 1A	H226 H314	**SHEET 22**

For more information please consult product-specific special instruction sheet.

This Safety data sheet has been adjusted according to COMMISSION REGULATION (EU) 2015/830 of 28 May 2015

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1 – Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product Name: **Acetonitrile**
CAS No: 75-05-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory reagents

1.3 Details of the supplier of the safety data sheet

See kit-specific safety data sheet (SDS)

1.4 Emergency telephone number

Emergency Phone #: +49-6251-701-900 (8:00 a.m. - 6:15 p.m. CET)

2 – Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. (Category 2), H225
Acute Tox. Inhalation (Category 4), H332
Acute Tox. Dermal (Category 4), H312
Acute Tox. Oral (Category 4), H302
Eye Irrit. (Category 2), H319

For the full text of the H-Statements mentioned in this section, see section 16.

2.2 Label elements

Labeling according Regulation (EC) No 1272/2008

Pictograms

GHS02 GHS07

Signal word Danger

Hazard statement(s)

H225	Highly flammable liquid and vapor.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

Precautionary statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

2.3 Other hazards

Results of PBT and vPvB assessment

- PBT: Not applicable
- vPvB: Not applicable

3 – Composition/Information on Ingredients

3.1 Substances

Synonyms: Methyl cyanide
Formula: C2H3N
Molecular Weight: 41.05 g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component/ Reagent	CAS-No.	EC-No	EC-Index No	Concentration [%]	Classification according to Regulation (EC) No 1272/2008 [CLP]	
Acetonitrile	75-05-8	200-835-2	608-001-00-3	≤100	Flam. Liq. 2 Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Eye Irrit. 2	H225 H332 H312 H302 H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

4 – First Aid Measures

4.1 Description of first aid measures

General advice
Consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

If inhaled
Move person into fresh air. If not breathing provide artificial respiration. Consult a doctor/physician.

In case of skin contact
Wash skin with soap and water/shower. Rinse thoroughly. Consult a doctor/physician.

In case of eye contact
Rinse opened eyes with plenty of water. Consult a doctor/physician.

If swallowed
Rinse mouth with water. Do NOT induce vomiting. Consult a doctor/physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 – Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for fire-fighters

Wear protective self-contained breathing device.

5.4 Further information

No data available

6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear personal protective equipment. Avoid formation and breathing of vapors, mist or gas.
Remove all sources of ignition. Vapors can accumulate in low areas.
Beware of vapors accumulating to form explosive concentrations.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter ground water.

6.3 Methods and material for containment and cleaning up
Spill and Leak Measures:
Stop leak if you can do it without risk.
Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large Spill: Flammable liquid. Poisonous liquid. Isolate spill or leak area. Keep away from heat. Eliminate all sources of ignition. Contain with earth, sand or other non-combustible material. Do not get water inside container. Do not touch or walk through spill. Water spray or a vapor suppressing foam may be used to reduce vapors. For large spills follow local emergency protocol for handling.

6.4 Reference to other sections
For disposal see section 13.

7 – Handling and Storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation and inhalation of vapor and mist. Ensure appropriate ventilation in the working area. Keep away from open flames, heat, and sources of ignition – Do NOT smoke. Prevent generation of electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a cold, dry and well-ventilated place. Keep away from heat and sources of ignition.

7.3 Specific end uses
Apart from the uses mentioned in section 1.2 no other specific uses are predetermined

8 – Exposure Controls / Personal Protection

8.1 Control parameters

Components with workplace control parameters

Product Name: Acetonitrile
CAS No: 75-05-8

IDLH: 500 ppm
NIOSH REL: TWA 20 ppm

Exposure Routes: Inhalation, skin absorption, ingestion, skin and/or eye contact

DNEL (Derived No Effect Level)

Application Area	Exposure routes	Health effects	Value
Workers	Inhalation	**Systemic effects** Long term exposure, Acute/short term exposure	68 mg/m^3
Workers	Inhalation	**Local effects** Long term exposure, Acute/short term exposure	68 mg/m^3

Workers	Dermal	**Systemic effects** Long term exposure	32.2mg/kg bw/day
General Population	Inhalation	**Systemic effects** Long term exposure	4.8 mg/m^3
General Population	Inhalation	**Systemic effects** Acute/short term exposure	220 mg/m^3
General Population	Inhalation	**Local effects** Long term exposure	4.8 mg/m^3
General Population	Inhalation	**Local effects** Acute/short term exposure	22 mg/m^3
General Population	Oral	**Systemic effects** Acute/short term exposure	0.6 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	10 mg/l
Marine water	1 mg/l
Fresh water sediment	7.53 mg/kg
Soil	2.41 mg/kg
Onsite sewage treatment plant	32 mg/l

8.2 Exposure controls

Appropriate engineering controls
Avoid contact with skin and eyes and clothing. Wash hands immediately after working with this product.

Personal protective equipment

- **Eye and face protection**
  Use safety glasses with side-shields. Use face protection. Use equipment for eye/face protection tested and approved under appropriate government standards.
- **Skin protection/Protection of hands**
  Handle with suitable gloves. Check condition of protective gloves prior to each use. Avoid skin contact with this reagent.
  Material of gloves: Impermeable gloves.
- **Body protection**
  Choose protective clothing protection according to amount and concentration of the hazardous substances handled. Wear work clothing protective against chemicals.
- **Respiratory protection**
  When vapors are generated use respiratory filter device. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevents pillage/leakage. Do not let product enter ground water.

9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Form: liquid Color: colorless
Odor	Ether-like
Odor Threshold	Not determined
pH	Not determined
Melting point/freezing point	ca. -45 °C
Boiling point/Boiling range	81-82 °C
Flash point	2 °C
Evaporation rate	Not determined
Ignitability (solid, gas)	Not determined
Upper/lower ignitability or explosion limits	Upper limit: 17 Vol % Lower limit: 3 Vol %
Vapor pressure	97 hPa at 20 °C

Vapor density	1.42
Density	0.768 g/cm^3 at 20 °C
Water solubility	soluble
Partition coefficient: n-octanol/water	Not determined
Autoignition temperature	524 °C
Decomposition temperature	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidizing properties	Not determined

9.2 Other information
No data available

10 – Stability and Reactivity

10.1 Reactivity
Vapors form explosive mixture with air.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Sources of heat. Flames and sparks.

10.5 Incompatible materials
Oxidizing agents
Acids/bases
Perchloric acids
Reducing agents
Alkali metals

10.6 Hazardous decomposition products
In the event of fire: see section 5.

11 – Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat – 2230 - 4050 mg/kg
LD50 Oral - mouse – 269 - 453 mg/kg
LC50/4 Inhalation - rat – 16,000 ppm

Skin corrosion/irritation
No irritating effect.

Serious eye damage/eye irritation
Irritating effect.

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information
Symptoms after uptake: Headache, dizziness, drowsiness, nausea, vomiting, unconsciousness, cyanosis, respiratory arrest, cardiac arrest, stupor, death.
The onset of symptoms may be delayed.
Treat as cyanide poisoning.

12 – Ecological Information

12.1 Toxicity
No information available

12.2 Persistence and degradability
No information available

12.3 Bio-accumulative potential
No information available

12.4 Mobility in soil
No information available

12.5 Results of PBT and vPvB assessment

- PBT:	Not applicable
- vPvB:	Not applicable

12.6 Other adverse effects
Avoid release into environment

13 – Disposal Considerations

13.1 Waste treatment methods

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company (External MSDS).

Contaminated packaging
Dispose of as unused product.

14 – Transport Information

14.1 UN number
UN 1648

14.2 UN proper shipping name
ACETONITRILE

14.3 Transport hazard classes
3

14.4 Packaging group
II

14.5 Environmental hazards
No

14.6 Special precautions for user
No data available.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not relevant

15 – Regulatory Information

This product has been classified and labeled according to the European Regulation 1272/2008/EC

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available.

15.2 Chemical Safety Assessment
A chemical safety assessment has not been carried out for this product.

16 – Other Information

Full text of H-Statements used in this data sheet

Hazard statement(s)	
H225	Highly flammable liquid and vapor.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
Flam. Liq.	Flammable liquids
Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation

Revision Date: 2015-12-29

1 – Identification of Substance/mixture and of the company/undertaking

1.1 Product identifiers

Product Name: **Formic acid**
CAS No: 64-18-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory reagents, to be used with *Immundiagnostik* assays

1.3 Details of the supplier of the safety data sheet

See kit-specific safety data sheet (SDS)

1.4 Emergency telephone number

Emergency Phone #: +49-6251-701-900 (8:00 a.m. - 6:15 p.m. CET)

2 – Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 3), H226
Skin corrosion (Category 1A), H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labeling according Regulation (EC) No 1272/2008
Pictograms

GHS02 GHS05

Signal word Danger

Hazard statement(s)

H226	Flammable liquid and vapor.
H314	Causes severe skin burns and eye damage.

Precautionary statement(s)

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental Hazard Statements: none

2.3 Other hazards

Results of PBT and vPvB assessment

- PBT:	Not applicable
- vPvB:	Not applicable

3 – Composition/Information on Ingredients

3.1 Substances

Formula : CH2O2
Molecular Weight : 46.03 g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component/ Reagent	CAS-No.	EC-No	EC-Index No	Concentration [%]	Classification according to Regulation (EC) No 1272/2008 [CLP]	
Formic acid	64-18-6	200-579-1	607-001-00-0	≤100	Flam. Liq. 3 Skin corr. 1A	H226 H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

4 – First Aid Measures

4.1 Description of first aid measures

General advice
Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

If inhaled
Move person into fresh air. If not breathing provide artificial respiration. Consult a doctor/physician.

In case of skin contact
Remove/Take off immediately all contaminated clothing. Wash skin with soap and water/shower. Rinse thoroughly. Consult a doctor/physician.

In case of eye contact
Rinse opened eyes with plenty of water for at least 15 minutes and consult a doctor/physician.

If swallowed
Rinse mouth with water. Do NOT induce vomiting. Consult a doctor/physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 – Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for fire-fighters

Wear protective self-contained breathing device.

5.4 Further information

No data available

6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Wear respiratory protection. Avoid breathing vapors, mist or gas. Remove all sources of ignition. Vapors can accumulate in low areas.

Beware of vapors accumulating to form explosive concentrations.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter ground water. Avoid discharge into environment.

6.3 Methods and material for containment and cleaning up
Spill and Leak Measures:
Stop leak if you can do it without risk.
Cover drains. Eliminate all sources of ignition. Do not touch or walk through spill. Spills should be contained with liquid-absorbent and neutralizing material. Collect absorbed material. Then wash away with plenty of water. Do NOT let this chemical enter the environment.
Dispose of properly.

6.4 Reference to other sections
For disposal see section 13.

7 – Handling and Storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation and inhalation of vapor and mist. Ensure appropriate ventilation in the working area. Keep away from open flames, heat, and sources of ignition – Do NOT smoke. Prevent generation of electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a cold, dry and well-ventilated place. Keep away from heat and sources of ignition. Store separated from strong oxidants, strong bases, and strong acids.

7.3 Specific end uses
Apart from the uses mentioned in section 1.2 no other specific uses are predetermined

8 – Exposure Controls / Personal Protection

8.1 Control parameters

Components with workplace control parameters

Product Name: Formic acid
CAS No: 64-18-6

NIOSH IDLH:: 30 ppm
NIOSH REL: TWA 5 ppm [1 ppm = 1.88 mg/m^3]

Exposure Routes: Inhalation, skin absorption, ingestion, skin and/or eye contact

DNEL (Derived No Effect Level)

Application Area	Exposure routes	Health effects	Value
Workers	Inhalation	**Local effects** Long term exposure	9.5 mg/m^3
Workers	Inhalation	**Local effects** Acute/short term exposure	19 mg/m^3
General Population	Inhalation	**Local effects** Long term exposure	3 mg/m^3
General Population	Inhalation	**Local effects** Acute/short term exposure	9.52 mg/m^3

8.2 Exposure controls

Appropriate engineering controls
Avoid contact with skin and eyes and clothing. Wash hands immediately after working with this product.

Personal protective equipment

- **Eye and face protection**
  Use safety glasses with side-shields. Use face protection. Use equipment for eye/face protection tested and approved under appropriate government standards.
- **Skin protection/Protection of hands**
  Handle with suitable gloves. Check condition of protective gloves prior to each use. Avoid skin contact with this reagent.
  Material of gloves: Impermeable gloves. Resistant to product.
- **Body protection**
  Choose protective clothing protection according to amount and concentration of the hazardous substances handled. Wear flame-retardant, antistatic protective work clothing.
- **Respiratory protection**
  When vapors are generated use respiratory filter device. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent spillage/leakage. Do not let product enter ground water.

9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Form: liquid Color: colorless
Odor	Pungent
Odor Threshold	Not determined
pH	Not determined
Melting point/freezing point	8 °C
Boiling point/Boiling range	101 °C
Flash point	69 °C
Evaporation rate	Not determined
Ignitability (solid, gas)	Not determined
Upper/lower ignitability or explosion limits	Upper limit: 51 Vol% Lower limit: 18 Vol%
Vapor pressure	4.6 kPa at 20 °C
Vapor density	1.6
Density	1.2 g/cm^3 at 20 °C
Water solubility	miscible
Partition coefficient: n-octanol/water	Log P: -0.54
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidizing properties	Not determined

9.2 Other information
No data available

10 – Stability and Reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Formation of toxic gases possible during heating or in the event of fire.

10.4 Conditions to avoid
Sources of ignition, electrostatic charges, and heat. Moisture.

10.5 Incompatible materials
Strong oxidizing agents, Strong Bases, Metals

10.6 Hazardous decomposition products
Formation of toxic gases possible during warming/heating or in the event of fire.

11 – Toxicological Information

11.1 Information on toxicological effects ACUTE TOXICITY

Acute toxicity
LD50 Oral - rat - 1100 mg/kg

Skin corrosion/irritation
Severe skin irritation.

Serious eye damage/eye irritation
Severe eye irritations.

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No classification data on carcinogenic properties of this material is available from IARC, NTP, ACGIH, and OSHA.

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
Causes damage to organs.

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information
Material is very corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion. Inhalation of the vapor may cause inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, lung edema. The substance may cause effects on the energy metabolism , resulting in acidosis. Shortness of breath, Headache, Nausea, Vomiting. Swallowing will cause strong effects on mouth, throat, esophagus and stomach with the danger of perforation.

12 – Ecological Information

12.1 Toxicity
LC50/96h – Fish: 46-100 mg/L
EC50/48h – Daphnia: 34.2 mg/L

12.2 Persistence and degradability
No information available

12.3 Bio-accumulative potential
No information available

12.4 Mobility in soil
No information available

12.5 Results of PBT and vPvB assessment

- PBT:	Not applicable
- vPvB:	Not applicable

12.6 Other adverse effects
No information available

13 – Disposal Considerations

13.1 Waste treatment methods

Product
Contact a licensed professional waste disposal company for disposal of hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.

Contaminated packaging
Dispose of as unused product.

14 – Transport Information

14.1 UN number
UN 1779

14.2 UN proper shipping name
FORMIC ACID

14.3 Transport hazard classes
8 Corrosive substances.
8+3

14.4 Packaging group
II

14.5 Environmental hazards
No

14.6 Special precautions for user
Warning: Corrosive substance.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not relevant

15 – Regulatory Information

This product has been classified and labeled according to the European Regulation 1272/2008/EC

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available.

15.2 Chemical Safety Assessment
A chemical safety assessment has not been carried out for this product.

16 – Other Information

Full text of H-Statements used in this data sheet

Hazard statement(s)	
H226	Flammable liquid and vapor.
H314	Causes severe skin burns and eye damage

Revision Date: *2015-12-29*

1 – Identification of Substance

1.1 Product identifiers

Product Name: **Iodoacetamide**
CAS No: 144-48-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory reagents

1.3 Details of the supplier of the safety data sheet

See kit-specific safety data sheet (SDS)

1.4 Emergency telephone number

Emergency Phone #: +49-6251-701-900 (8:00 a.m. - 6:15 p.m. CET)

2 – Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. (Category 3), H301
Resp. Sens. (Category 1), H334
Skin Sens. (Category 1), H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictograms

GHS08 GHS06

Signal word Danger

Hazard statement(s)

H301	Toxic if swallowed.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statement(s)

P261	Avoid breathing dust.
P280	Wear protective gloves
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

2.3 Other hazards

None

3 – Composition/Information on Ingredients

3.1/3.2 Substances/Mixtures

Formula: C2H4INO
Molecular Weight: 184.96 g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component/ Reagent	CAS-No.	EC-No	EC-Index No	Concentration [%]	Classification according to Regulation (EC) No 1272/2008 [CLP]	
2-Iodoacetamide	144-48-9	205-630-1	-	≤100	Acute tox. 3 Resp. Sens. 1 Skin Sens. 1	H301 H334 H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

4 – First Aid Measures

4.1 Description of first aid measures

General advice
Consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

If inhaled
Move person into fresh air. If not breathing provide artificial respiration. Consult a doctor/physician.

In case of skin contact
Wash off with soap and plenty of water. Take affected person immediately to hospital. Consult a physician.

In case of eye contact
Rinse opened eyes with plenty of water for at least 15 minutes.

If swallowed
Rinse mouth with water. Do NOT induce vomiting. Consult a doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

5 – Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Nitrogen oxides (NOx), Hydrogen iodide

5.3 Advice for fire-fighters
Wear protective self-contained breathing device. Prevent skin contact.

5.4 Further information
No data available

6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear personal protective equipment. Wear respiratory protection. Avoid breathing vapors, mist or gas. Prevent skin contact. Ensure adequate ventilation. Evacuate contaminated area.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Spill and Leak Measures:
Stop leak if you can do it without risk.
Cover drains. Do not touch or walk through spill. Spills should be contained with inert absorbent material and dispose of as hazardous waste. Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

7 – Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation and inhalation of vapor and mist. Ensure appropriate ventilation in the working area.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cold, dry and well-ventilated place. Do not use metal containers. If in solid form, store with desiccant.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are predetermined

8 – Exposure Controls / Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin and eyes and clothing. Wash hands immediately after working with this product.

Personal protective equipment

- **Eye and face protection**
  Use safety glasses with side-shields. Use face protection. Use equipment for eye/face protection tested and approved under appropriate government standards.
- **Skin protection/Protection of hands**
  Handle with suitable gloves. Check condition of protective gloves prior to each use. Avoid skin contact with this reagent. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
  Material of gloves: Impermeable gloves. Resistant to product.
- **Body protection**
  Choose protective clothing protection according to amount and concentration of the hazardous substances handled.
- **Respiratory protection**
  When vapors are generated use respiratory filter device. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent spillage/leakage.Do not let product enter ground water.

9 – Physical and Chemical Properties

9.1 Information on basicphysical and chemicalproperties

Appearance	Form: crystalline Colour: light yellow
Odour	No data available
Odour Threshold	No data available

pH	No data available
Melting point/freezing point	No data available
Boiling point/Boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Ignitability (solid, gas)	No data available
Upper/lower ignitability or explosion limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Density	No data available
Water solubility	100 g/l
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other information
No data available.

10 – Stability and Reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Exposure to light may affect product quality.

10.5 Incompatible materials
Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents

10.6 Hazardous decomposition products
For decomposition products see section 5.

11 – Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat - 74 mg/kg

Skin corrosion/irritation
No data available.

Serious eye damage/eye irritation
No data available.

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No classification data on carcinogenic properties of this material is available from IARC, NTP, ACGIH, and OSHA.

Reproductive toxicity
No data available.

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information
RTECS #: AC4200000

12 – Ecological Information

12.1 Toxicity
No data available

12.2 Persistence and degradability
No information available

12.3 Bioaccumulative potential
No information available

12.4 Mobility in soil
No information available

12.5 Results of PBT and vPvB assessment

- PBT:	Not applicable
- vPvB:	Not applicable

12.6 Other adverse effects
No information available

13 – Disposal Considerations

13.1 Waste treatment methods

Product
Contact a licensed professional waste disposal company for disposal of hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.

Contaminated packaging
Dispose of as unused product.

14 – Transport Information

14.1 UN number
UN2811

14.2 UN proper shipping name
TOXIC SOLID, ORGANIC, N.O.S. (2-Iodoacetamide)

14.3 Transport hazard classes
6.1

14.4 Packaging group
III

14.5 Environmental hazards
no

14.6 Special precautions for user
No data available.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not relevant

15 – Regulatory Information

This product has been classified and labeled according to the European Regulation 1272/2008/EC

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available.

15.2 Chemical Safety Assessment
A chemical safety assessment has not been carried out for this product.

16 – Other Information

Full text of H-Statements used in this data sheet

Hazard statement(s)	
H301	Toxic if swallowed.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Acute Tox.	Acute toxicity
Resp. Sens.	Respiratory sensitisation
Skin Sens.	Skin sensitisation

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